ORDER NO. TD98010599C2

Service Manual

Mini Cassette

Stereo Cassette Player DOLBY SYSTEM※

RQ-X15

Colour

(K).....Black Type
(A).....Blue Type
(S).....Silver Type

Area

Suffix for Model No.	Areas	Colour
[E]	Europe	(K) (A) (S)

MECHANISM SERIES: AR20

■SPECIFICATIONS

General:

Power Requirements:	Battery;1.5V (one R6/LR6, "AA",UM-3 battery)
Power Output:	5mW+5mW..RMS(max.)
Output:	Headphones; 30Ω, ϕ 3.5
Dimensions:	109.9(W)×80.5(H)×29.8(D)mm
Weight:	154g (Without batteries)
Frequency Response: (-6dB)	40~18,000Hz (Normal,High/Metal)
Tape Speed:	4.8cm/s
Track System:	4-track, 2-channel stereo playback

Notes:

1.Weights and dimensions shown are approximate.
2.Design and specifications are subject to change without notice.

※Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

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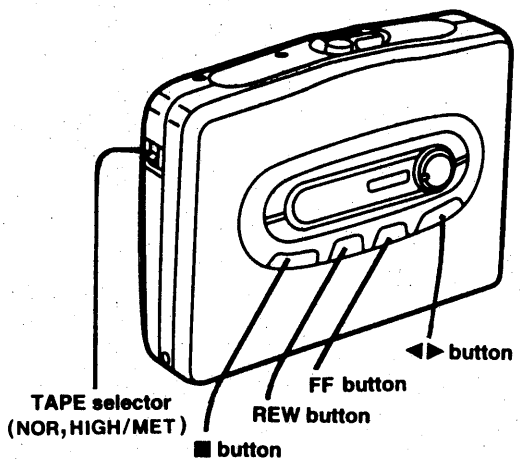
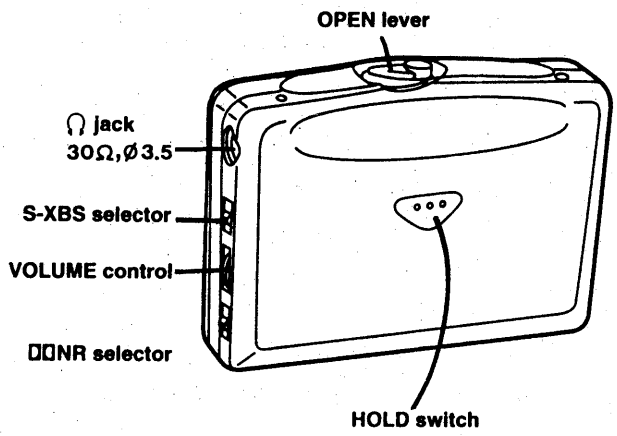
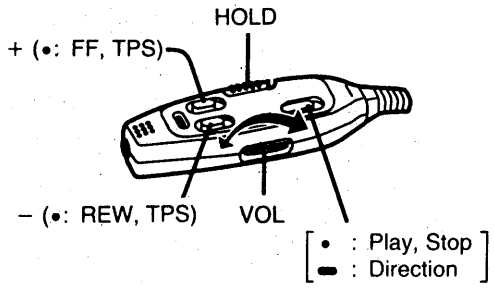
Contents

■ LOCATION OF CONTROLS

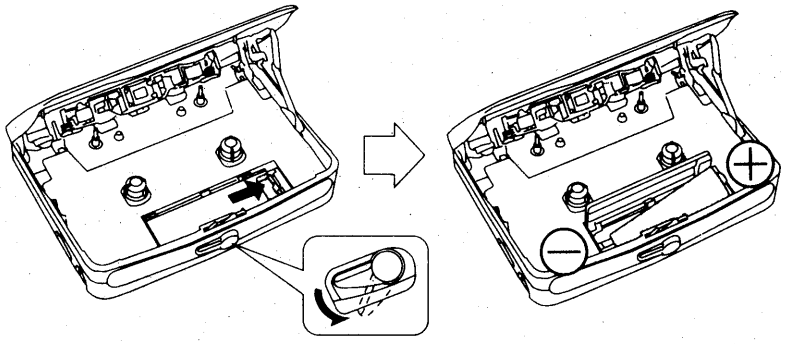






■ POWER SOURCE

- **Dry cell battery**
  Insert a R6/LR6 battery
  (UM-3 or equivalent, not included).



■ ACCESSORIES

- **Stereo earphones with remote controller**
  .....RFEV316P-K1S

■ MEASUREMENTS AND ADJUSTMENTS

●ADJUSTMENT INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING ADJUSTMENT	
1. Set volume control to maximum. 2. Set Dolby NR Switch to OFF. 3. Set Tape selector switch to NORMAL. 4. Set S-XBS Switch to OFF.	5. Set hold switch to OFF. 6. Set power source voltage to 1.5V DC. 7. Output of signal generator should not be higher than necessary to obtain an output reading.

• CONTROL POSITIONS AND EQUIPMENT USED

1. Frequency counter

●TAPE SECTION

ITEM	TEST TAPE	MEASUREMENT POINT	ADJUSTMENT POINT	PROCEDURE
Tape speed	QZZCWAT (3kHz, −10dB)	Connect the frequency counter to Headphones jack (30Ω) (Refer to Fig. 1)	VR1 (Refer to Fig. 2)	Playback the central part of the tape and adjust VR1 so that the tape speed is as follows. Forward: 3000 ± 10Hz Reverse: 2940~3060Hz Make sure that the frequency range in within ±60Hz for between "Forward" and "Reverse" mode.

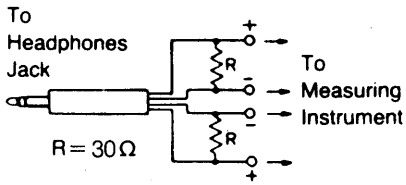


Fig. 1

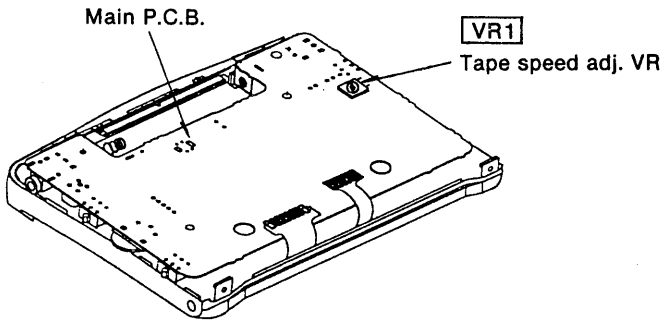


Fig. 2

■ PROCEDURES FOR DISASSEMBLY OF THE MAIN PARTS ON THE MECHANISM

• How to remove the mechanism

Follow the procedures in Ref. Nos. 1~4 in the Disassembly Instructions. (See page 5.)
※ After replacing the parts, refer to the notes for assembly. (See page 7.)

• How to remove the head block and pinch roller

1. Follow the procedures in Ref. Nos. 1 and 4 in the Disassembly Instructions, remove the cabinet ass'y and cassette lid ass'y.
(See page 5.)
2. Unsolder the head FPC. (6 points.)
(See Fig. 3.)

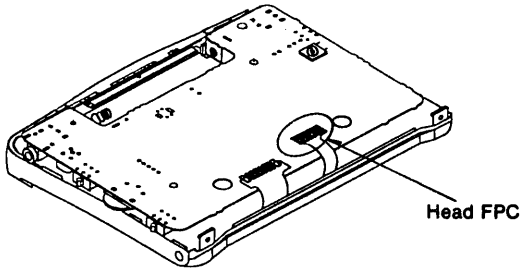


Fig. 3

3. Remove the head block in the direction of the arrow ① and ②. (See Fig. 4. and 5.)
4. Remove the pinch roller in the direction of the arrow ③. (See Fig. 6.)
5. Remove 2 springs in order to remove the pinch roller. (See Fig. 7.)

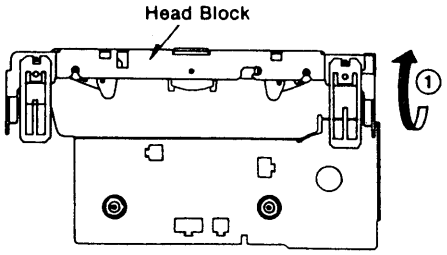


Fig. 4

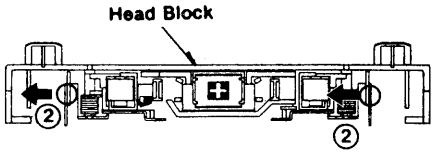


Fig. 5

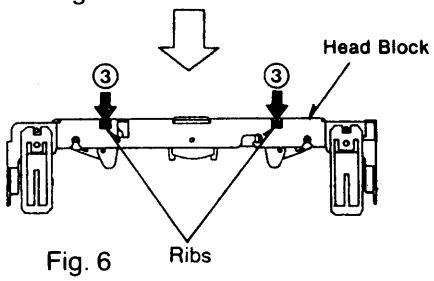


Fig. 6

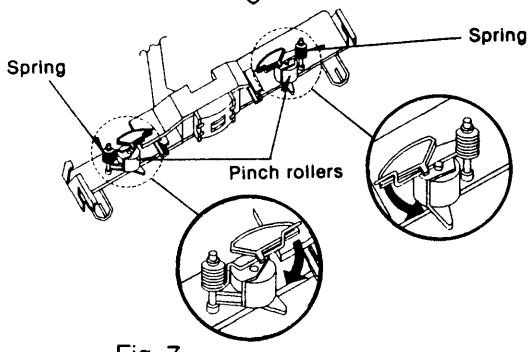


Fig. 7

• How to remove the motor and belt

1. Follow the procedures in Ref. Nos. 1 and 2 in the Disassembly Instructions. (See page 5.)
2. Remove 2 screws (❶, ❷). (See Fig. 8.)
3. Remove the motor in the direction of the arrow. (See Fig. 9.)
4. Remove the belt from the motor. (See Fig. 9.)

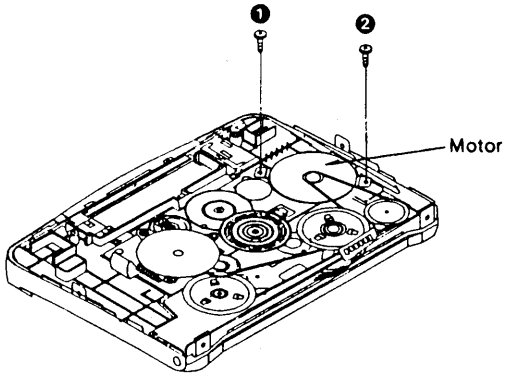


Fig. 8

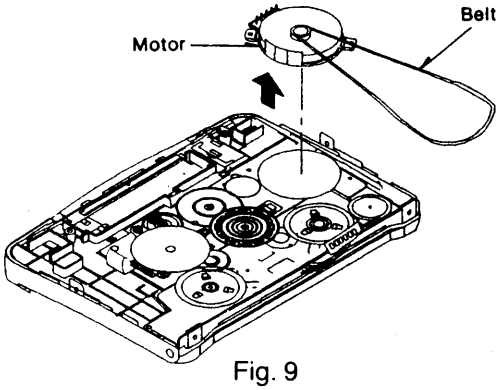


Fig. 9

• How to remove the rotary switch

1. Remove 3 screws (❶~❸). (See Fig. 10.)

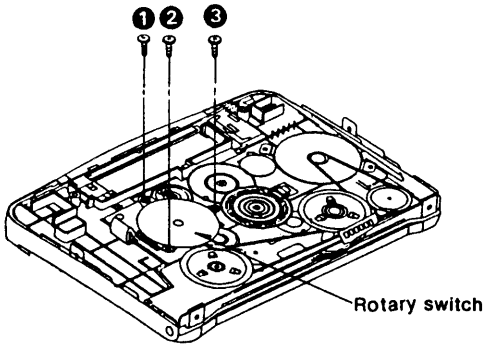
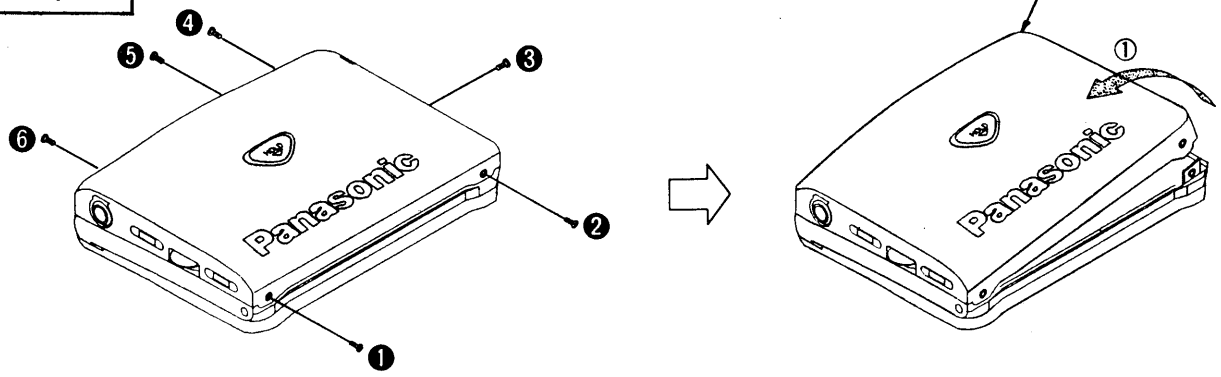


Fig. 10

■ DISASSEMBLY INSTRUCTIONS

Ref. No. 1	Removal of the rear cabinet

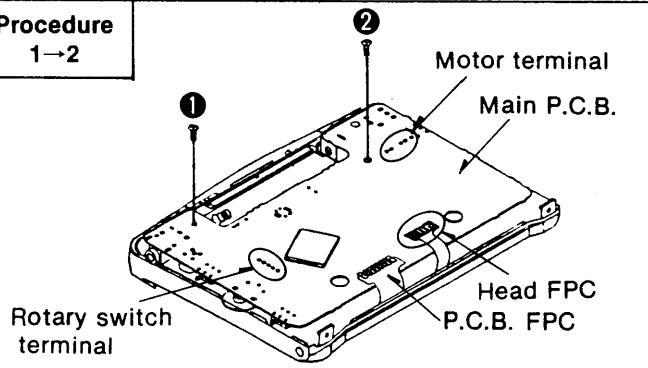
Procedure 1



1. Remove 6 screws (❶~❻).
2. Remove the rear cabinet in the direction of arrow ①.

Ref. No. 2	Removal of the main P.C.B.

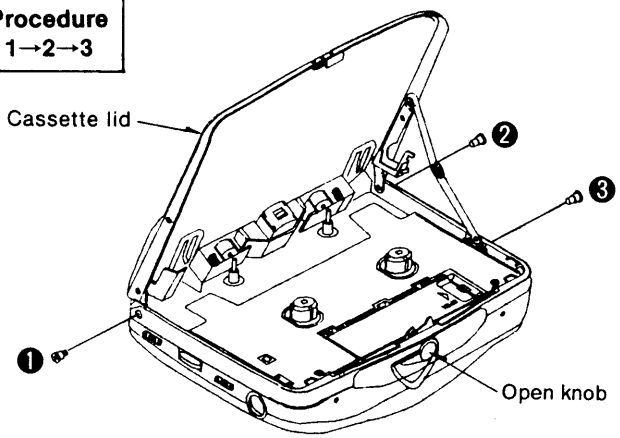
Procedure 1→2



1. Remove the 3 screws (❶~❷).
2. Remove 8 solders of the P.C.B. FPC.
3. Remove 6 solders of the head FPC.
4. Remove 5 solders on the motor terminal.
5. Remove 5 solders on the rotary switch terminal.

Ref. No. 3	Removal of the cassette lid

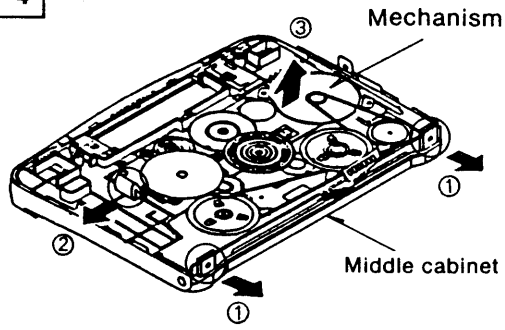
Procedure 1→2→3



1. Push the open knob, and then open the cassette lid.
2. Remove 3 screws (❶~❸) in order to remove the cassette lid.

Ref. No. 4	Removal of the middle cabinet and mechanism

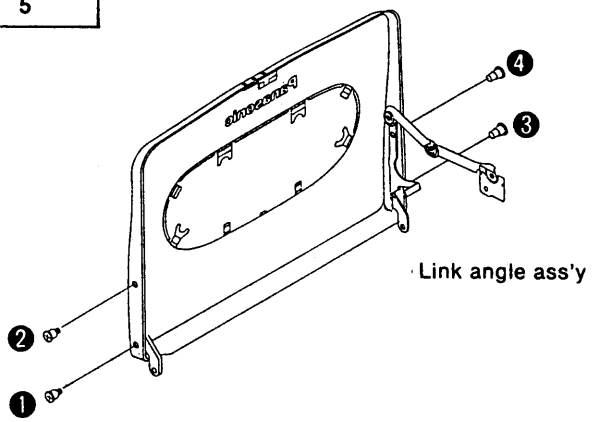
Procedure 1→2→3→4



1. Remove the middle cabinet in the direction of arrows ①, ② and then remove it in the direction of arrow ③.

Ref. No. 5	Removal of the link angle ass'y

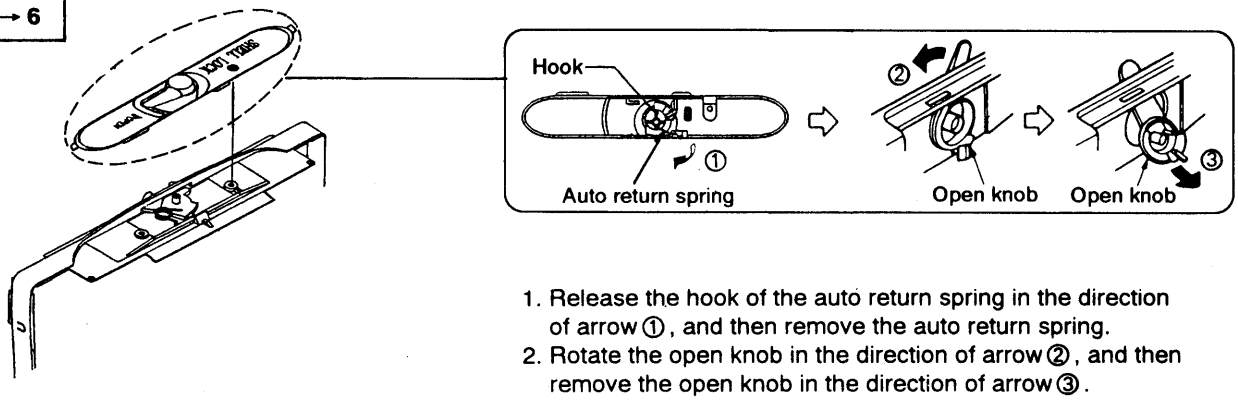
Procedure 5



1. Remove 4 screws (❶~❹).

Ref. No. 6	Removal of the open knob

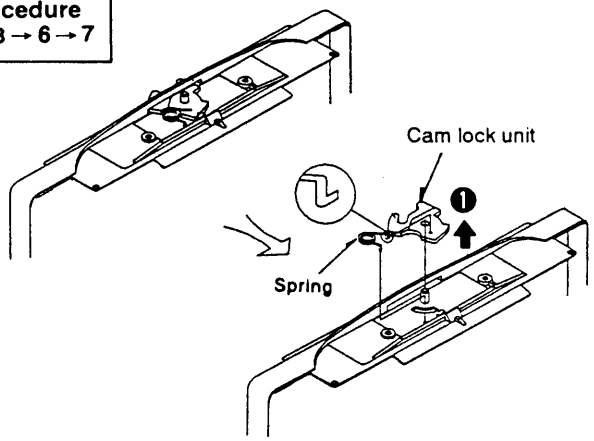
Procedure 1 → 3 → 6



1. Release the hook of the auto return spring in the direction of arrow ①, and then remove the auto return spring.
2. Rotate the open knob in the direction of arrow ②, and then remove the open knob in the direction of arrow ③.

Ref.No. 7	Removal of the cam lock unit

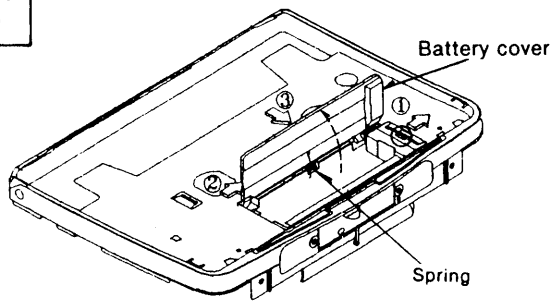
Procedure 1 → 3 → 6 → 7



1. Remove the cam lock unit in the direction of the arrow (❶).

Ref.No. 8	Removal of the battery cover

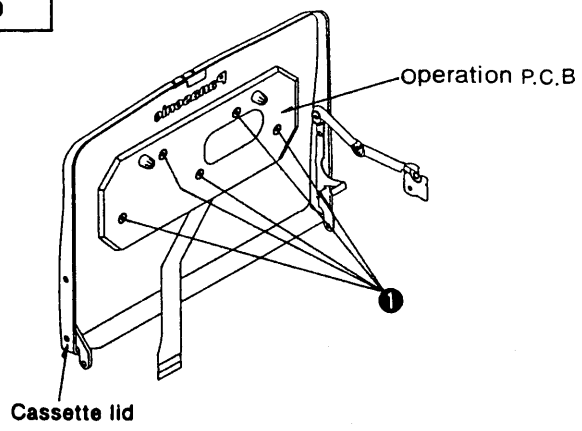
Procedure 1 → 3 → 8



1. Open the lithium battery cover in the direction of the arrow ①.
2. Remove the battery cover in the direction of arrow ② and ③.
3. Remove the spring.

Ref.No. 9	Removal of the operation P.C.B.

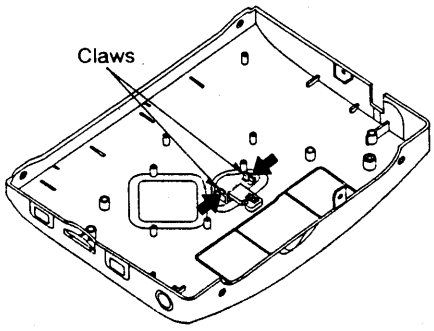
Procedure 1 → 9



1. Remove the 5 screws (❶).

Ref.No. 10	Removal of the switch knob

Procedure 1 → 10

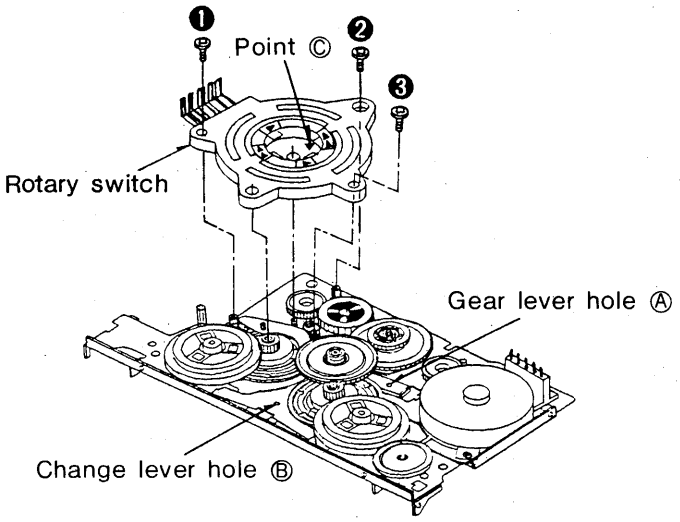


- Release the claws of knob in the direction of arrow, and then remove the switch knob.

Notes for assembly

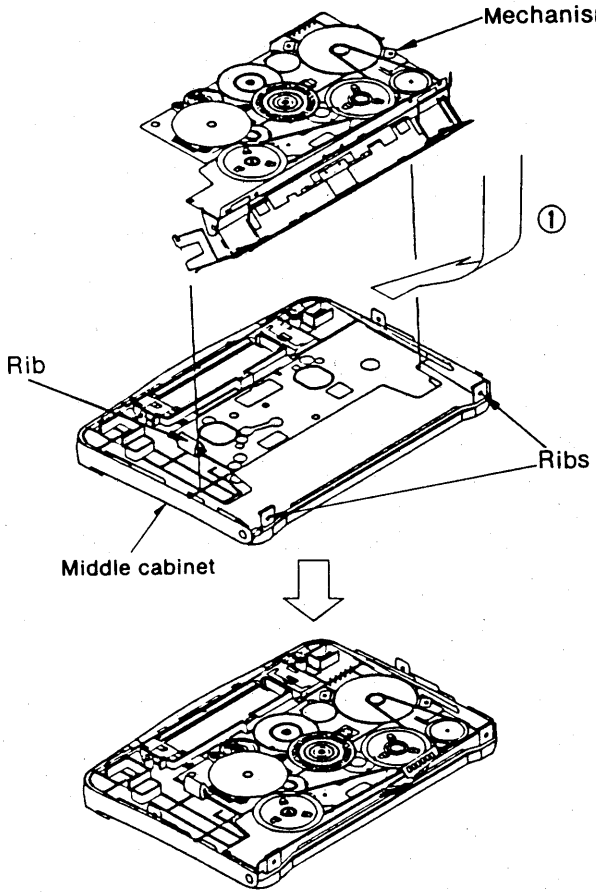
■Notice for assembling the rotary switch

1. Move the gear lever manually until hole Ⓐ match the hole of chassis.
2. Move the change lever manually until hole Ⓑ match the hole of chassis.
3. Rotate manually the rotary switch gear until the point Ⓒ (▶) direct the REW mark (◀◀).
4. To fix the rotary switch, use 3 screws to tighten it.

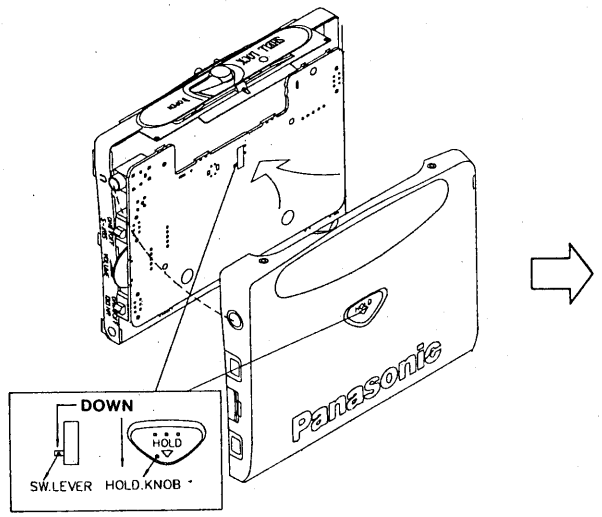


■ Notice for assembling the mechanism

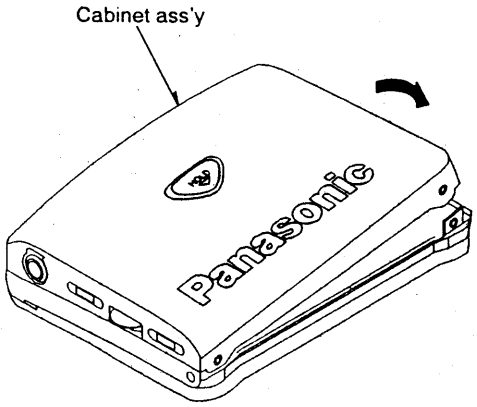
1. Install the mechanism in the direction of arrow ①.
2. Engage the mechanism in the ribs of the middle cabinet.
3. Make sure the ribs fully to the mechanism.



■ Notice for installing the knobs and assembling the cabinet ass'y



1.The hold knob to the switch lever in the direction of arrow.



2.Make sure the cainet ass'y is installed compietely and the knobs can be operated after assembled.

Note: Before installing the switch knob, be sure to check the claws for defects that would render the claws unserviceable.
(If a white line like white wax on a claw is found, the claw may be broken when installing the switch knob.)

■ HOW TO CHECK OPERATIONS DURING DISASSEMBLY AND SERVICING

1. Cassette section

- Check operations during disassembly following the steps.

1) Set the condition as shown in Fig. 1 in accordance with Disassembly Instructions. (DO NOT remove the solders on the head FPC.)
2) Connect the PCB and motor and rotary switch with the extension cord (RFKZ0002).
3) Short the short land with a soldering and then short-circuit them.
   - Short the short land SL1 for Power supply of AMP ON.
   - Short the short land SL2 for Power supply of motor ON.
   - Short the short land SL3 for Microcomputer reset.
   - Short the short land SL4 for Power supply of motor CCW
   - Short the short land SL5 for Open/Close SW: ON.

   Note: See next page for the points to be short-circuited.
4) Connect the battery (−) terminal to the mechanism chassis earth with a lead wire.
5) Manually operate the rotary switch gear when checking the FWD/REV/FF/REW operation.
   - Rotate manually the rotary switch gear (Fig 1-1) as the arrow direction shown until the checking mode you need direct the pointer.
6) Connect the battery (+) terminal and the battery (−) terminal foil to the power source (DC 1.5V) with a lead wire. (Fig. 1)

Notes:

① You have to turn off the power when you want to change mechanism mode.
② Even if the mechanism unit is switched to the REV mode in Step 6, the head change-over switch (IC1) will remain in the FWD position, so set the FWD mode to check the audio.
Before checking the operation problems and adjustments, be sure to release the hold state.
(Hold switch (S2): "OFF")
③ After checking,
unsolder the short land SL1 ~ SL5.

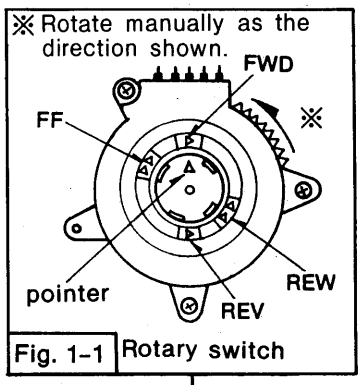


Fig. 1-1 Rotary switch

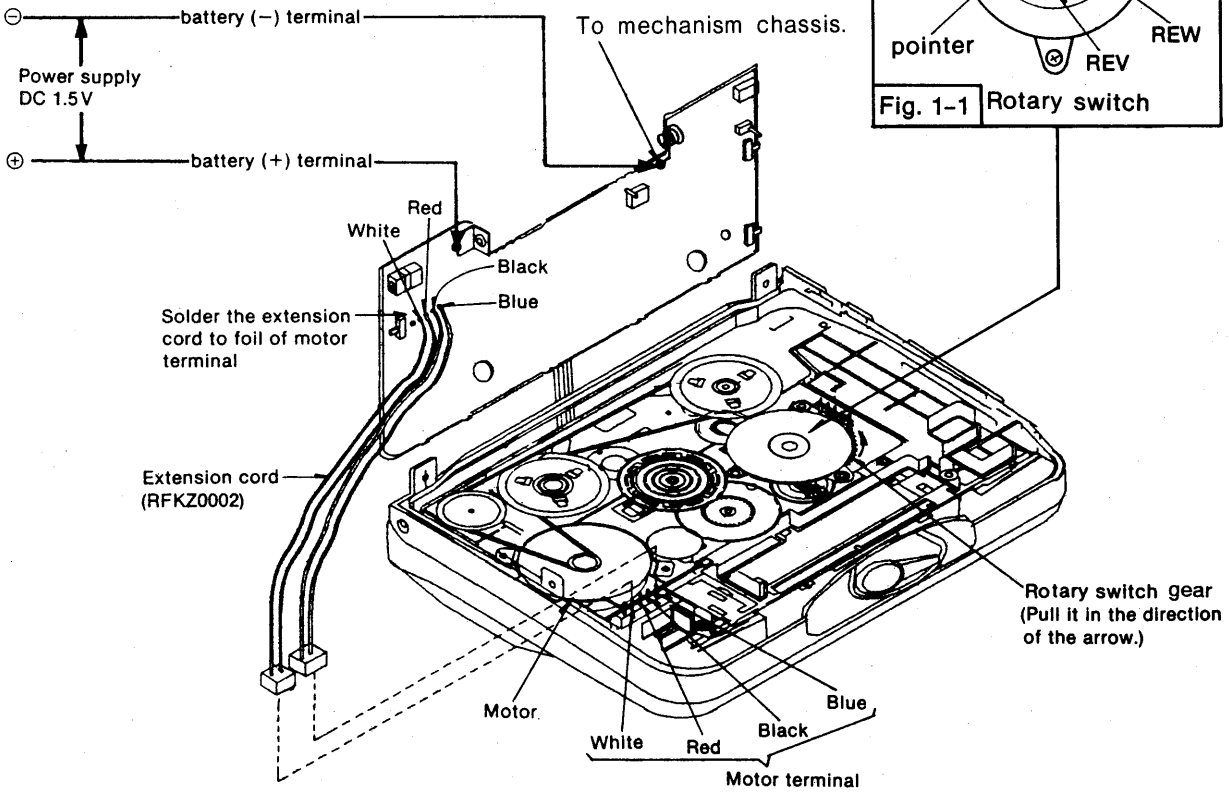
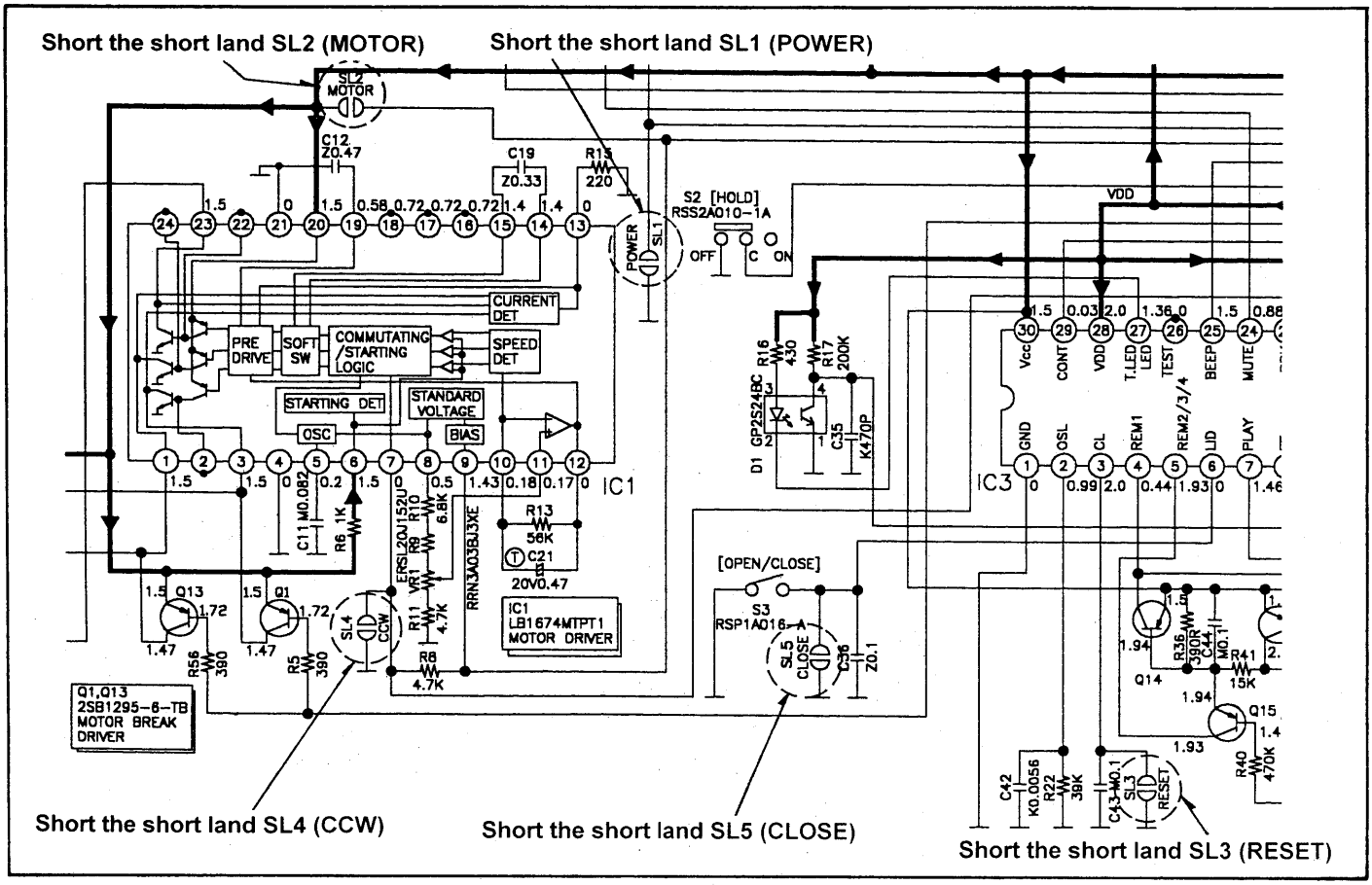


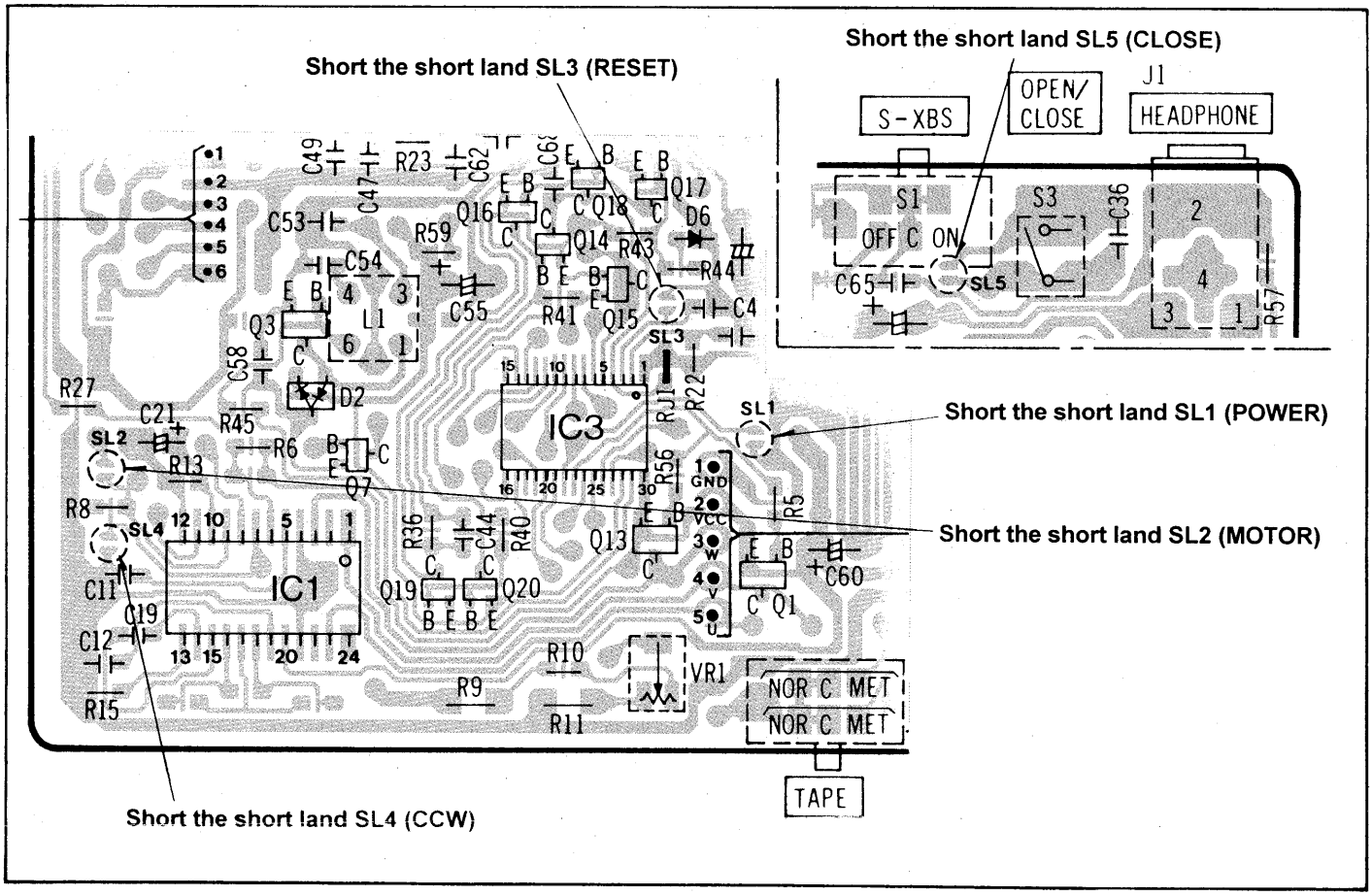
Fig. 1

• Short points

SCHEMATIC DIAGRAM



PRINTED CIRCUIT BOARD



Notes:

- ●S1: S-XBS switch "OFF" position.
- ●S2: Hold switch in "OFF" position.
- ●S3: Open/close switch in "OPEN" position.
- ●S4-1, 4-2: Tape selector switch in "Normal" position.
- ●S5: Dolby NR switch in "ON" position.
- ●S6: Rotary switch in "FWD" position.
  (1...FWD, 2...FF, 3...REV, 4...REW)
- ●S7: STOP switch in "OFF" position.
- ●S8: PLAY switch in "OFF" position.
- ●S9: REW switch in "OFF" position
- ●S10: FF switch in "OFF" position.
- ●S11: BATT CHK switch in "OFF" position
- ●VR1: Tape speed adjustment VR.
- ●VR2-1,2-2: Volume control VR.
- ●DC voltage measurement are taken witch electronics voltmeter from negative terminal of battery.
  NO mark...playback.
- ●Battery current: Volume minimum output 84mA
  Volume minimum output.....100mA
- ● ——▶ + B Voltage Line.
  ▪▪▪▶ Playback Signal (Rch).
  ▫▫▫▷ Playback Signal (Lch).
- ●**This schematic diagram may be modified at any time with the development of new technology.**

■ RESISTOR AND CAPACITOR PARTS LIST

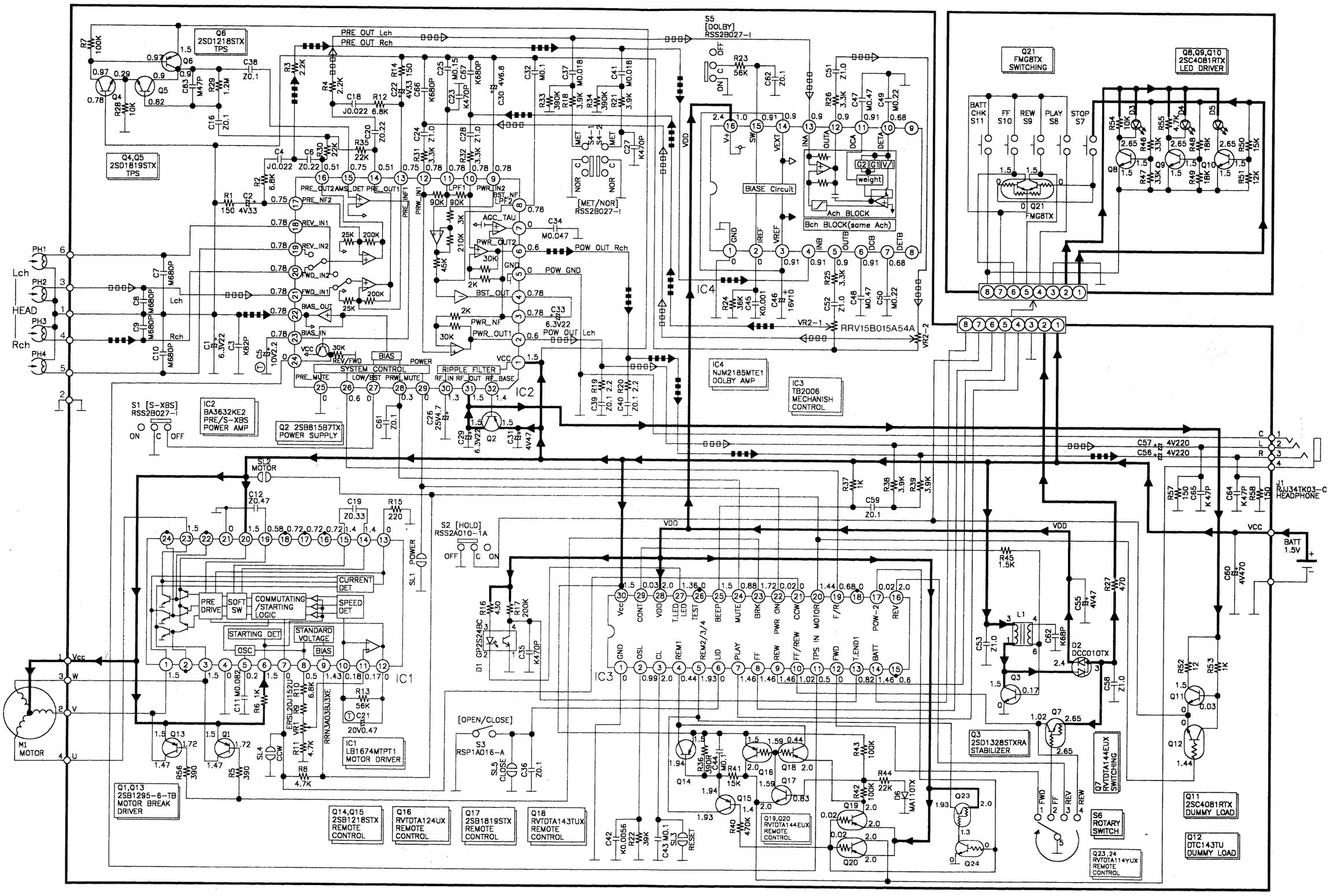
Notes:

1. (T)Indicates parts than are supplied by **TAMACO**
2. (M)Indicates parts than are supplied by **MESA**

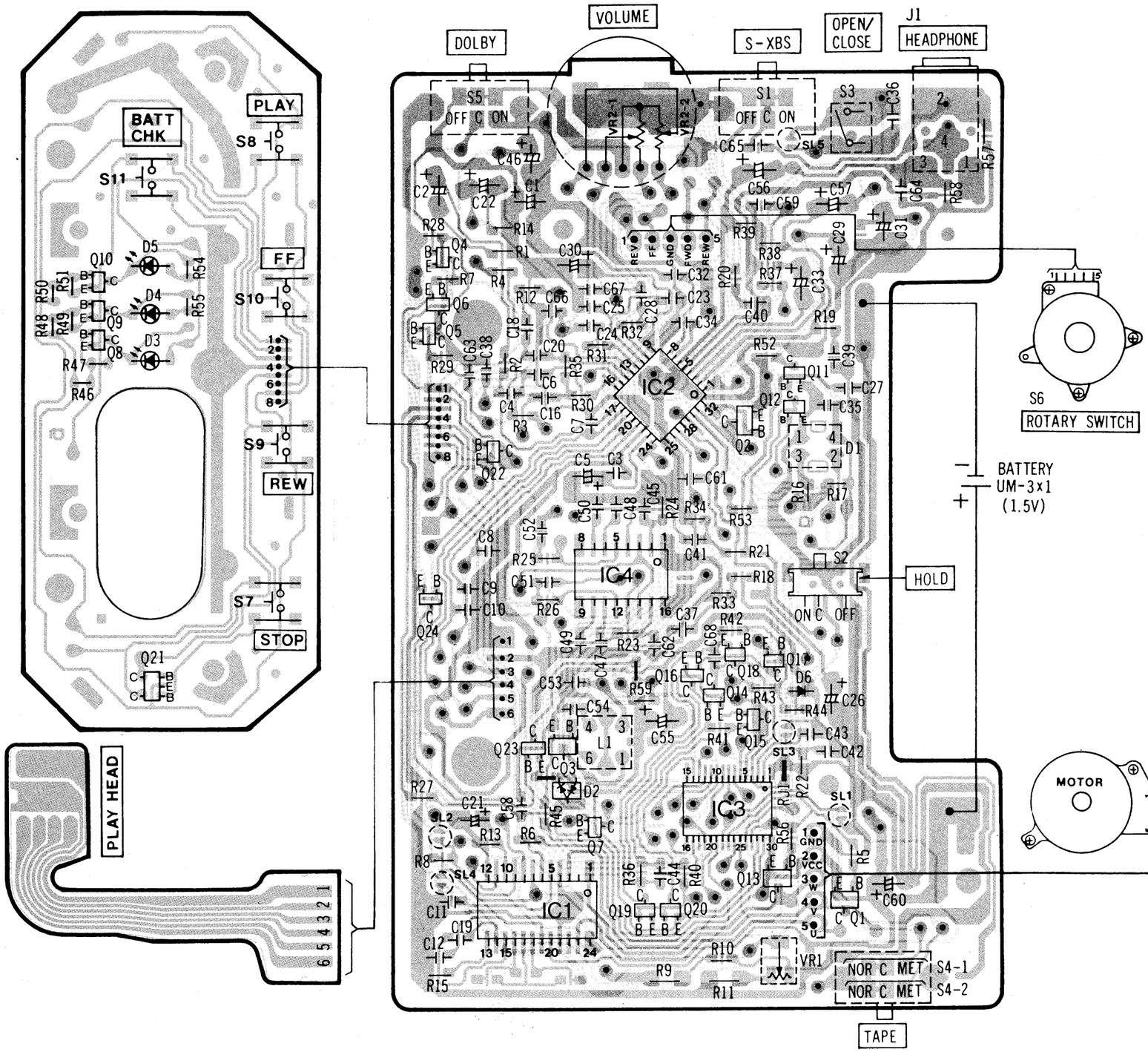
Ref No.	Parts No.	Values & Remarks
RESISTORS		
R1,14	**ERJ6GEYJ151V**	(M)
R2,10,12,54	**ERJ6GEYJ682V**	(M)
R3,4	**ERJ6GEYJ222V**	(M)
R5,56	**ERJ6GEYJ391V**	(M)
R6,37,53	**ERJ6GEYJ102V**	(M)
R7,42,43	**ERJ6GEYJ104V**	(M)
R8	**ERJ6GEYJ472V**	(M)
R9	**ERSL20J152U**	(T)
R11,55	**ERJ6GEYJ562V**	(M)
R13,23	**ERJ6GEYJ563V**	(M)
R15	**ERJ6GEYJ331V**	(M)
R16	**ERJ6GEYJ431V**	(M)
R17	**ERJ6GEYJ204V**	(M)
R18,21,38,39	**ERJ6GEYJ392V**	(M)
R19,20	**ERJ6GEYJ2R2V**	(M)
R22	**ERJ6GEYD393V**	(M)
R24	**ERJ6GEYJ363V**	(M)
R25,26,31,32	**ERJ6GEYJ332V**	(M)
R27	**ERJ6GEYJ122V**	(M)
R28	**ERJ6GEYJ103V**	(M)
R29	**ERJ6GEYJ125V**	(M)
R30,35,44	**ERJ6GEYJ223V**	(M)
R33,34,36	**ERJ6GEYJ394V**	(M)
R40	**ERJ6GEYJ474V**	(M)
R41	**ERJ6GEYJ153V**	(M)
R45	**ERJ6GEYJ152V**	(M)
R46,48,50	**ERJ6GEYJ273V**	(M)
R47,49,51	**ERJ6GEYJ333V**	(M)
R52	**ERJ6GEYJ120V**	(M)
CHIP JUMPER		
J1,2	**ERJ6GEY0R00V**	(M)

Ref No.	Parts No.	Values & Remarks
CAPACITORS		
C1,29,33,	**ECEA0JKS220I**	(M)
C2,22	**ECEA0GKS330I**	(M)
C3	**ECUV1H330KCN**	(M)
C4,18	**ECUV1E223JBN**	(M)
C5	**RCST1AY225RE**	(M)
C6,20	**ECUV1C224ZFN**	(M)
C7,8,9,10,66,67	**ECUV1H681KBN**	(M)
C11	**ECUV1C823MBN**	(M)
C12	**ECUV1C474ZFN**	(M)
C16,32,38,43	**ECUV1C104MBN**	(M)
C19	**ECUV1C334ZFN**	(M)
C21	**ECST1DY474RR**	(M)
C23,27,35	**ECUV1H471KBN**	(M)
C24,28,51,52, 53,58,62	**ECUVNC105ZFN**	(M)
C25	**ECUV1C154MBN**	(M)
C26	**ECEA1EKS4R7I**	(M)
C30	**ECST0GY685RR**	(M)
C31,55	**ECEA0GKS470I**	(M)
C34	**ECUV1C473MBN**	(M)
C36,39,40,44 ,59,61	**ECUV1C104ZFN**	(M)
C37,41	**ECUV1C183MBN**	(M)
C42	**ECUV1H562KBN**	(M)
C45	**ECUV1H102KBN**	(M)
C46	**ECEA1CKS100I**	(M)
C47,48	**ECUV1C474MBN**	(M)
C49,50	**ECUV1C224MBN**	(M)
C54,64,65	**ECUV1H680KCN**	(M)
C56,57	**ECEA0GKS221I**	(M)
C60	**ECEA0GKS471I**	(M)
C63	**ECUV1H820KCN**	(M)

■ SCHEMATIC DIAGRAM



■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



■ REPLACEMENT PARTS LIST (ELECTRICAL)

Notes:
1. (T) Indicates parts that are supplied **TAMACO**
2. (M) Indicates parts that are supplied **MESA**

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
INTEGRATED CIRCUITS, TRANSISTORS AND DIODES			
IC1	**LB1674MTPT1**	I.C.MOTOR DRIVE	(T)
IC2	**BA3632KE2**	I.C.PRE/S-XBS/POWER AMP	(T)
IC3	**TB2006FN**	I.C.MECH.CONTROL	(T)
IC4	**NJM2185MTE1**	I.C.DOLBY	(T)
Q1,13	**2SB1295-6-TB**	Transistor	(T)
Q2	**2SB815B7TX**	Transistor	(T)
Q3	**2SD1328STXRA**	Transistor	(T)
Q4,5,17	**2SD1819STX**	Transistor	(T)
Q6,14,15	**2SB1218STX**	Transistor	(T)
Q7	**RVTDTA144EUX**	Transistor	(T)
Q8,9,10	**2SC4081RTX**	Transistor	(T)
Q11	**2SD1328STXRA**	Transistor	(T)
Q12	**RVTDTC143TUX**	Transistor	(T)
Q16	**RVTDTA124TUX**	Transistor	(T)
Q18	**RVTDTA143TUX**	Transistor	(T)
Q19,20	**RVTDTA144EUX**	Transistor	(T)
Q21	**FMG8TX**	Transistor	(T)
Q23,24	**RVTDTA114YUX**	Transistor	(T)
D1	**GP2S24BC**	Photo Coupler	(T)
D2	**DCC010TX**	Diode	(T)
D3,4,5	**LN1261CTR**	Chip L.E.D	(T)
D6	**MA110TX**	Chip Diode	(T)
COIL			
L1	**RLO9A004-T**	D-D CON.Coil	(T)
VARIABLE RESISTOR			
VR1	**RRN3A03BJ3XE**	V.R.Tape Speed	(T)
VR2	**RRV15B01A54A**	V.R.Volume	(T)
SWITCHES			
S1	**RSS2B027-I**	SW,S-XBS	(T)
S2	**RSS2A010-1A**	SW,Hold	(T)
S3	**RSP1A016-A**	SW, (Open/Close)	(T)
S4	**RSS2B027-I**	SW,Tape (Met/Nor)	(T)
S5	**RSS2B027-I**	SW,Dolby	(T)
S6	**RSR5D001-A**	SW,Rotary (Mode)	(T)
S7	**EVQPQMB55**	SW,Stop	(T)
S8	**EVQPQMB55**	SW,Play	(T)
S9	**EVQPQMB55**	SW,REW	(T)
S10	**EVQPQMB55**	SW,FF	(T)
S11	**EVQPQMB55**	SW,BATT CHK	(T)
JACK			
J1	**RJJD4E30**	Jack, Headphones	(T)

Notes:

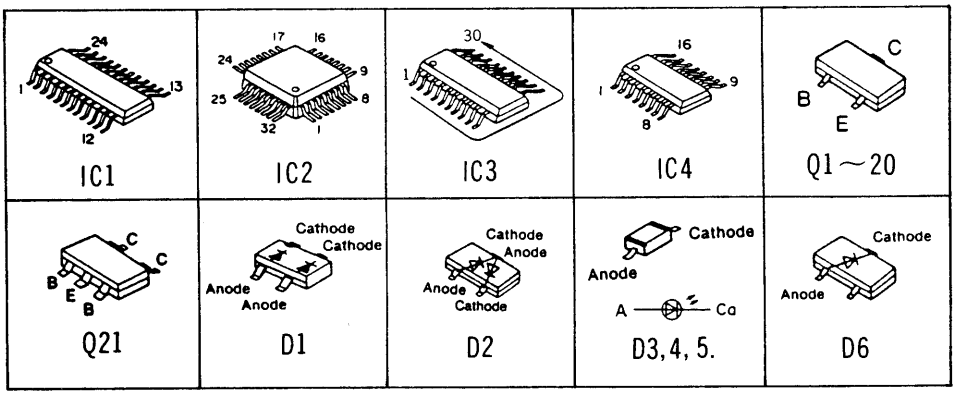
- In this printed circuit board diagram, the parts and foil patterns on the board facing toward you are printed in black.
  The opposite side is printed in blue.
- The " • " mark denotes the connection points of double-faced foil patterns (through holes) on both side of the printed circuit board.
- This printed circuit board diagram may be modified at any time with the development of new technology.

■ TERMINAL FUNCTION OF IC

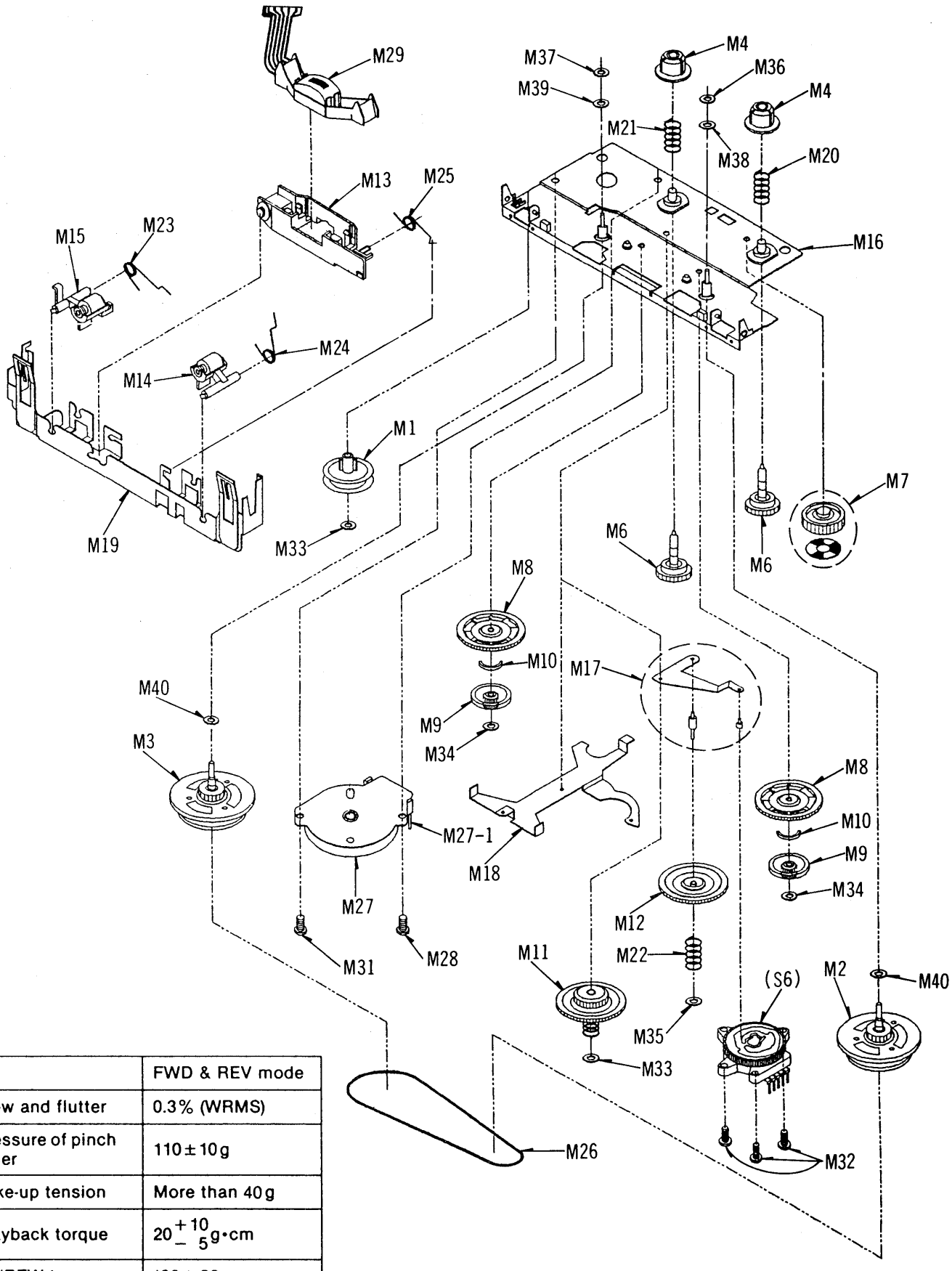
● **IC3 (TB2006FN011): Mechanism control**

Pin No.	Mark	I/O Division	Function
1	GND	—	GND terminal
2	OSC	I/O	System clock terminal fosc=6.4kHz
3	CL	I	Clear (RESET) terminal
4	REM1	I	Inputs the remote signal for the stand by releas of DC/DC converter
5	REM 2/3/4	I	Inputs the signal for remote control
6	LID	I	Detection signal whether the cassette tape is inserted
7	PLAY	I	Inputs the mechanism operation signal (PALY) At low: PLAY
8	FF	I	Inputs the mechanism operation signal (FF) At low: FF
9	REW	I	Inputs the mechanism operation signal (REW) At low: REW
10	FF/REW	I	Inputs the mechanism status detection signal (FF/REW) At hi: FF, At low: REW
11	TPS IN	I	Inputs the TPS Control signal
12	FWD	I	Inputs the mechanism status detection signal (FWD) At low: FWD
13	T.END1	I	Inputs the signal for the derection of tape rotation. When the pulse signal is input: The current mode remains set as the tape is rotating. No pulse signal: Stops or starts reverse playback as the tape has stopped rotaing (ie,reched the end)
14	BATT	I	Inputs the battery operation signal At low: BATT
15,18 ,26	NC	—	Not connected
16	REV	I	Inputs the mechanism status detection signal (REV) At low: REV
17	POW-2	O	Outputs the remote control signal at low
19	F/R	O	FWD/REV select terminal At high: FWD ON At low: REV ON
20	M-CTL	O	Outputs the motor drive signal (MOTOR ON/OFF). At high: ON At low: OFF
21	CCW	O	Outputs the reversing motor drive control signal At high: REV At low: FF
22	POWER	O	Outputs the power switching signal At low: ON
23	BRK	O	Outputs the mechanism operation signal (STOP). At low: STOP
24	MUTE	O	Outputs the muting signal At low: muting ON
25	BEEP	O	Ouptuts the buzzer out terminal
27	T-LED LED	O	Ouptuts the photo coupler control signal terminal
28	VDD	I	Power Supply terminal
29	CONT	O	Ouptuts the DC-DC converter drive signal
30	VCC	I	Power supply terminal

• **Terminal guide of IC's, transistors and diodes**

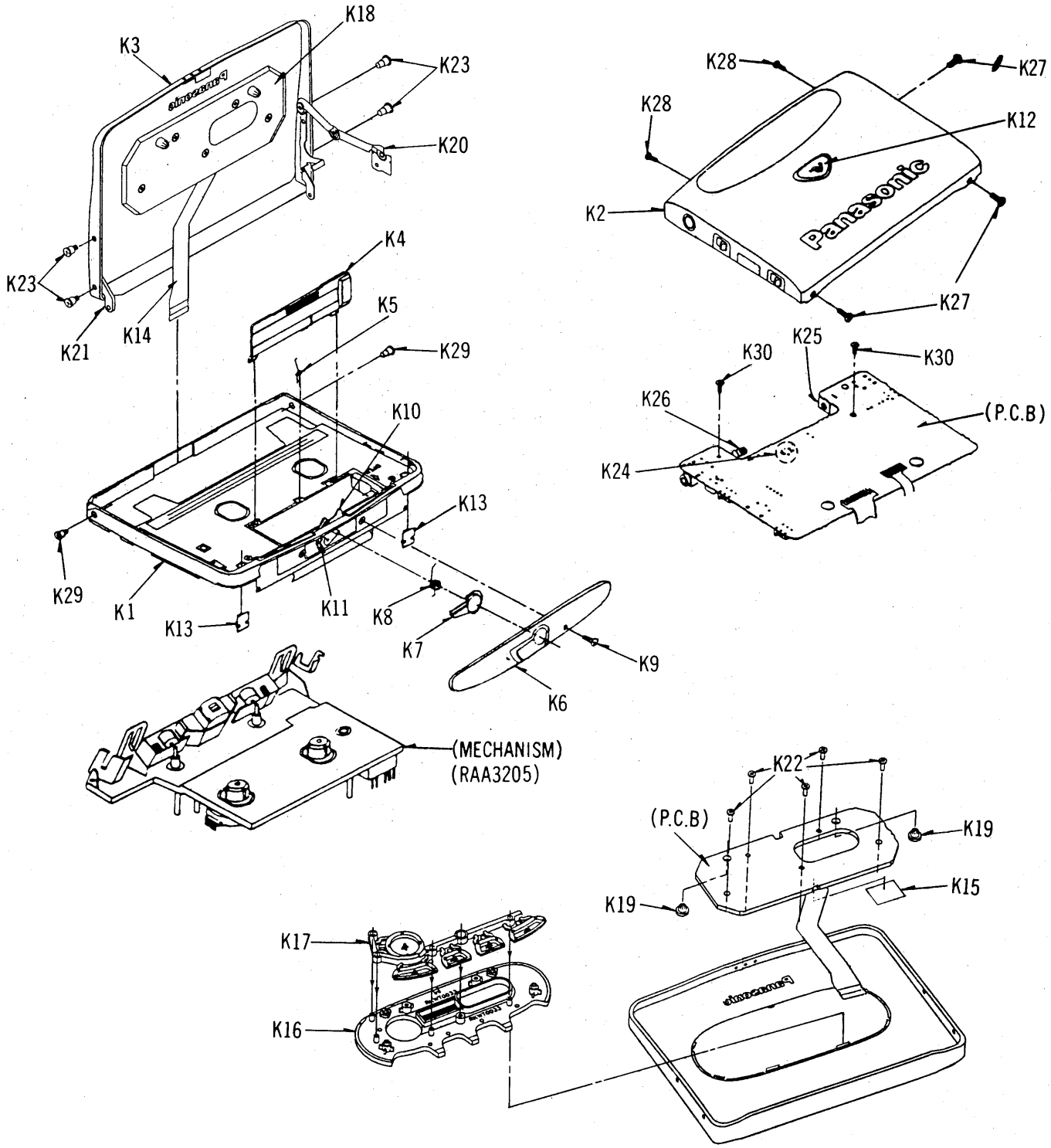


■ MECHANISM PARTS LOCATION



	FWD & REV mode
Wow and flutter	0.3% (WRMS)
Pressure of pinch roller	110 ± 10 g
Take-up tension	More than 40 g
Playback torque	20^{+10}_{-5} g·cm
FF/REW torque	130 ± 30 g·cm

■CABINET PARTS LOCATION



■ REPLACEMENT PARTS LIST (MECHANISM, CABINET, ACCESSORIES, PACKING AND JIG/TOOL)

Notes:

1. The (T) Indicates parts that are supplied **TAMACO**
2. The (M) Indicates parts that are supplied **MESA**
3. The reference number SA represent the grease tool usea for unit.

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
MECHANICAL PARTS			
M1	**RDP0069**	Center Pulley	(T)
M2	**RFKRQXV30C**	Flywheel F Ass'y	(T)
M3	**RFKRQXV30D**	Flywheel R Ass'y	(T)
M4	**RDR0030**	Reel Cap	(T)
M6	**RDG0274**	Reel Gear	(T)
M7	**RFKRQX10EC**	Idler Gear Ass'y	(T)
M8	**RDG0276**	Change Gear A	(T)
M9	**RDG0277**	Change Gear B	(T)
M10	**RMQ0434-1**	Changing Plate	(T)
M11	**RFKRQXV30B**	Friction Gear Ass'y	(T)
M12	**RDG0280**	Operation Gear	(T)
M13	**RML0335-2**	Head Arm	(T)
M14	**RFKRQX10EE**	Pinch Roller Arm Ass'y F	(T)
M15	**RFKRQX10EF**	Pinch Roller Arm Ass'y R	(T)
M16	**RFKRQX05A**	Chassis Ass'y	(T)
M17	**RFKRQX10EH**	Gear Lever	(T)
M18	**RML0339**	Change Lever	(T)
M19	**RFKRQXV30E**	Head Block Spacer	(T)
M20	**RMB0353**	Reel Spring F	(T)
M21	**RMB0354**	Reel Spring R	(T)
M22	**RMB0356**	Operation Gear Spring	(T)
M23	**RMB0357-1**	Pinch Arm Spring R	(T)
M24	**RMB0358-1**	Pinch Arm Spring F	(T)
M25	**RMB0359**	Head Arm Spring	(T)
M26	**RDV0059**	Belt	(T)
M27	**BFL26NBCWB**	Motor	(T)
M27-1	**RJST0001**	Header Motor	(T)
M28	**RHD14061**	Screw (Motor Earth)	(T)
M29	**RED0033**	Head Ass'y	(T)
M31	**RHD14063**	Screw (Motor)	(T)
M32	**RHD14043**	Screw (Rotary Switch)	(T)
M33	**RHW10003**	Washer (Frition Gear/Center Pulley)	(T)
M34	**RHW17009**	Washer (Change Gear)	(T)
M35	**RHW11005**	Washer (Operation Gear)	(T)
M36	**RHW11004**	Washer (Capstan F)	(T)
M37	**RHW12015**	Washer (Capstan R)	(T)
M38	**RHW13014**	Washer (Capstan F)	(T)
M39	**RHW13015**	Washer (Capstan R)	(T)
M40	**RHW13016**	Washer (Under Side-Capstan)	(T)

Ref No.	Parts No.	Parts Name & Description	Values & Remarks
CABINET PARTS			
K1	**RFKKQX05E-S**	Middle Cabinet Ass'y	(T)
K2	**RKST0018D-S**	Rear Cabinet (Silver)	(T)
K2	**RKST0018D-A**	Rear Cabinet (Blue)	(T)
K2	**RKST0018D-K**	Rear Cabinet (Black)	(T)
K3	**RFKLQX15E-S**	Cassette Lid Ass'y (Silver)	(T)
K3	**RFKLQX15E-A**	Cassette Lid Ass'y (Blue)	(T)
K3	**RFKLQX15E-K**	Cassette Lid Ass'y (Black)	(T)
K4	**RKKT0005-K**	Battery Cover	(T)
K5	**RMBT0001**	Spring	(T)
K6	**RKQT0006A-S**	Upper Cabinet	(T)
K7	**RGWT0013-S**	Open Knob	(T)
K8	**RMBT0012**	Return Spring	(T)
K9	**RHDT0002-S**	Screw	(T)
K10	**RMAT0019**	Lock Cam	(T)
K11	**RMBT0013**	Lock Cam Spring	(T)
K12	**RGVT0024-H**	Hold Knob	(T)
K13	**RMCT0002-1**	Pack Spring	(T)
K14	**RJBT0077A**	FPC PWB	(T)
K15	**RMZT0009**	FPC Sheet	(T)
K16	**RKWT0033-Q**	Panel	(T)
K17	**RGUT0067-S**	Deck Button	(T)
K18	**RMVT0014-K**	PWB, Sheet	(T)
K19	**RMGT0023-K**	Stabilizer Gum	(T)
K20	**RMAX1053**	Link Ass'y	(T)
K21	**RMAT0002**	Basic Angle (R)	(T)
K22	**RHDT14015-K**	Screw	(T)
K23	**RHDT0003-S**	Screw (Silver)	(T)
K23	**RHDT0003-K**	Screw (Blue,Black)	(T)
K24	**RMNT0009**	Phot Coupler Case	(T)
K25	**RJCT30005**	Battery Terminal (+)	(T)
K26	**RJCT70005-1**	Battery Terminal (-)	(T)
K27	**RHDT14017-S**	Screw (Silver)	(T)
K27	**RHDT14017-K**	Screw (Black,Blue)	(T)
K28	**RHDT0002-S**	Screw (Silver)	(T)
K28	**RHDT0002-K**	Screw (Black,Blue)	(T)
K29	**RHDT0005-K**	Screw	(T)
K30	**XTNR14+3**	Screw	(T)
ACCESSORIES			
A1	**RQTT0216-E**	Instruction Book	(T)
A2	**RFEV316P-K1S**	Inner Phones	(T)
PACKING MATERIALS			
P1	**RPKT0201**	Decoration Box (Silver)	(T)
P1	**RPKT0213**	Decoration Box (Blue)	(T)
P1	**RPKT0212**	Decoration Box (Black)	(T)
P2	**RPFT0015**	Set Bag	(T)
JIG/TOOL			
SA1	**QZZCWAT**	TEST TAPE(Tape Speed etc)	(M)
SA2	**QZZCFM**	TEST TAPE(AZIMUTH/FREQ)	(M)

■ PACKING